

Laboratory

GLANDERS

Agent Overview: The causative agent of Glanders is the bacterium *Burkholderia mallei*,

a faintly staining gram-negative coccobacillus.

Lab Specimen Submittal:

Authorization by Dr. Jane Getchell, DPHL director, Christina Pleasanton, DPHL deputy director, or Dr. Jack Liou, bioterrorism

coordinator.

Type of Specimens Necessary for Testing:

Environmental testing for culture: Use two dry Dacron swabs (not cotton) to collect specimen and put in two separate sterile tubes.

Clinical specimen for culture and/or PCR: specimens for culture include blood, urine, abscesses, tissue aspirates. ONLY whole blood (EDTA), purple top tube, or serum, red/black top tube, may be submitted for PCR. If blood is submitted for PCR, a blood culture

bottle must also be drawn to confirm the PCR result.

Grown organism for culture and/or PCR from sentinel laboratory: referred organism on agar or in liquid media for rule-out testing or

confirmation.

Packaging Instructions: Environmental specimens must be double bagged and the outside of

the bag decontaminated (10% bleach).

Grown organisms or clinical specimens must be in unbreakable double containers and outside of container decontaminated (10%)

bleach).

Receiving Specimens

at DPHL:

Authorized specimens are accepted at the back of the building by the loading dock. Submitter must present ID and have proper forms

completed.

Handling of Specimens: Chain of custody procedures must be followed for environmental

samples or any samples, specimens and materials that could be used as evidence in a legal proceeding. Environmental samples are kept at room temperature and clinical specimens at refrigerator temperature

(in a cooler, but not frozen) until delivered to the laboratory.

Reporting Results: Preliminary: A preliminary positive or negative test result is issued

upon completion of PCR. PCR may take 24 hrs. However, all PCR

results must be confirmed by culture. PCR will detect both

Burkholderia mallei and Burkholderia pseudomallei. Culture is

necessary to differentiate between species.

Negative: Negative culture reports are issued after 4 days.

Positive: Positive culture reports may be issued as early as 4 days

after submission

Contact Information: Jane Getchell, DrPH, DPHL director, 302-223-1520 (24/7 coverage).

24/7 Emergency Contact Number: 1-888-295-5156

Revised: 05/2008